

ABSTRACT OF THE DISCLOSURE

3 An electro-mechanical wireline assembly as shown for anchoring
4 a wireline tool string in place during a wellbore under balanced
5 well conditions. The assembly includes an upper connection for
6 connection to the wireline leading to the well surface and a lower
7 connector for engaging a wireline tool. An outer mandrel is
8 attached to the lower connector. An inner mandrel is carried at
9 least partly within the outer mandrel and is capable of axial
10 movement within the outer mandrel. A slip gripping assembly is
11 carried on the outer mandrel and includes slips which are normally
12 biased radially inward but which can be moved radially outward for
13 engaging a surrounding wellbore and holding the wireline tool
14 string in place. An electric motor assembly is carried on the
15 wireline assembly between the upper and lower connectors. The
16 electric motor assembly is actuatable by an electric current supplied
17 from the well surface through the wireline to effect axial movement
18 of the inner mandrel relative to the outer mandrel to expand the
19 gripping slips in a radial direction between a start position and
20 a set position. The electric motor assembly can be switched in
21 order to reverse the direction of axial movement of the inner
22 mandrel relative to the outer mandrel to retract the gripping slips
23 and return the slips to the start position. A back-up manual
24 release means is provided for manually retracting the gripping
25 slips radially inward upon completion of wellbore operations.